

San Joaquin Valley Unified Air Pollution Control District

PERMIT UNIT: C-904-9-2

EXPIRATION DATE: 11/30/2002

EQUIPMENT DESCRIPTION:

K-4: 1,320 HP INGERSOL-RAND KVG I.C. ENGINE, SN 123LL668, NATURAL GAS DRIVEN, SERVING PIPELINE COMPRESSORS.

Permit Unit Requirements

1. This device shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201, 5.1.8.3] Federally Enforceable Through Title V Permit
2. Nox emissions from this device shall not exceed 640 ppmv (corrected to 15% oxygen on a dry basis). [District Rule 4701, 5.1.1]
3. CO emissions from this device shall not exceed 2000 ppmv (corrected to 15% oxygen on a dry basis). [District Rule 4701, 5.1.1]
4. Permittee shall notify the District at least 30 days prior to any compliance source testing and submit a source test plan for District
5. Source test results must be submitted to the District within 60 days of completion of the source test. [District Rule 1081, 7.3] Federally Enforceable Through Title V Permit
6. This device shall be source tested to show compliance with permitted Nox and CO emission limits at least once every 8760 hours of operation as described in section 6.3.1 of District Rule 4701 (Amended December 19, 1996). [District Rule 4701, 6.3.1 and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. Permittee shall record total engine monthly fuel consumption, individual engine hours of operation and all records of required monitoring data and support information. [District Rule 4102]
8. Emissions from this device shall not exceed 653 lb. Nox/day, 1243 lb. CO/day, 9.8 lb. VOC/day, nor 5.1 lb. PM10/day. [District Rule 2201, 5.1.9.2] Federally Enforceable Through Title V Permit
9. Permittee shall record the results of portable analyzer measurements of exhaust Nox and CO concentrations as ppmvd corrected to 15% oxygen.

Records shall be maintained for at least five years and made available to the District upon request. [District Rule 4701]

10. Permittee shall monitor the nitrogen oxides (Nox) and carbon monoxide (CO) concentrations in the engine exhaust using a portable emission analyzer every 165 hours of operation (approximately weekly) +/-24 hours. [District Rule 4701]

11. If results of the weekly measurements with the portable analyzer show compliance with the emissions limits for (3) consecutive months, monitoring frequency can be decreased to (1) measurement each 500 hours of operation (approx. 3 weeks) +/-50 hours. [District Rule 4701]

12. The relative accuracy (RA) of the portable analyzer shall meet the performance specification given in 40 CFR Part 60, Appendix B, Spec. 2 when tested by side-by-side comparison with the analyzers used for source testing. [District Rule 4701]

13. The results of the annual performance testing of the portable emissions analyzer shall be reported along with the source test results for this engine. [District Rule 4701]

14. Particulate matter emission from IC engine shall not be in excess of 0.1 grain per cubic foot of gas at dry standard conditions. [District Rule 4201, 3.1]
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15. Discharge of sulfur compounds from IC engine shall not exceed in concentration at the point of discharge 0.2 percent by volume calculated as sulfur dioxide (SO₂), on a dry basis averaged over 15 consecutive minutes. [District Rule 4801, 3.1] Federally Enforceable Through Title V Permit

16. The IC engine shall be fired only on PUC quality natural gas with a sulfur content of less than or equal to 0.017% by weight. [District Rule 4801, 3.1]
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17. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072-80, D 3031-81, D 4084-82 or D 3246-81. [District Rule 2520 , 9.4.2] Federally Enforceable Through Title V Permit

18. If the engine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to

weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

19. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

20. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201, Kings County Rule 404, District Rule 4801 and Kings County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit